

RECORDS OF MICROLEPIDOPTERA FROM SOUTH-WESTERN SCOTLAND, JULY, 1994

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WHEN MY SISTER proposed that we should spend a week's holiday, touring with bed and breakfast accommodation, in the counties of Dumfriesshire (VC72), Kirkcudbrightshire (VC73), and Wigtownshire (VC74), I welcomed the suggestion, not least because south-western Scotland is one of the parts of the British Isles with fewest records for microlepidoptera. However, the holiday was not planned as an entomological expedition. The object was to visit some of the notable gardens and antiquities of the region and to enjoy the coastal and mountain scenery. Nevertheless, I took my light-trap and was able to do periodic roadside recordings for spells ranging from a few minutes to an hour or more. The gardens were mainly stocked with alien and often subtropical vegetation, unwelcome to British Lepidoptera, and my sister and I sometimes parted company so that I could search the peripheral native trees and plants.

I wished to ascertain whether the paucity of records was due to an impoverished fauna or lack of recording, and found that both were responsible. Leaf-mining species were particularly scarce. I failed to find a single mine on hawthorn, hazel, sloe, bramble, rose, poplar or lime. Oak, apart from numerous vacated mines of *Eriocrania subpurpurella* (Haworth), yielded one vacated mine of *Stigmella ruficapitella* (Haworth) and not a single *Phyllonorycter* species. Sallow gave just one *Phyllonorycter* mine, identified as *P. salicicolella* (Sircom) when the adult emerged, and one larval feeding of *Caloptilia stigmatella* (Fabricius). Birch produced an occasional vacated mine of *Stigmella lapponica* (Wocke) and one or two *Phyllonorycter ulmifoliella* (Hübner); alder only a few widely dispersed mines of *P. rajella* (Linnaeus). Beech and rowan were more productive, most of their quota of leaf-miners being present; *Caloptilia syringella* (Fabricius) was abundant, mainly on ash.

I formed the impression that some species were more selective in their foodplant than elsewhere in Britain. For instance, holm-oak abounds in Castle Kennedy Gardens and the trees were almost disfigured by the innumerable mines of *Phyllonorycter messaniella* (Zeller), yet there was no trace of its feeding on deciduous oak or beech either there or elsewhere. In the Isles of Scilly holm-oak and beech are attacked by this species with impartiality. In the same gardens *Lyonetia clerkella* (Linnaeus) was mining cultivated apple in plenty, but I could not find a single mine on other rosaceous trees at any locality.

The scarcity of leaf-mines is not due to seasonal discrepancy between north and south, since this part of Scotland has a very mild climate as is testified by the lush green vegetation. Such leaf-mines as are present

conform in their timing with those in the south. My only other visit to this part of Scotland was in July 1975, when my wife and I concentrated almost exclusively on nepticulid records, finding them as hard to make then as in 1994. The late E.C. Pelham-Clinton and Dr J.R. Langmaid were in the area in 1988, and the latter tells me that they, too, were struck by the dearth of species. Is there an explanation?

I was able to run my trap on five nights and at four sites, two in VC74 and one each in VCs 72 and 73. Three of the cottages where we stayed were in rather bleak country, where big catches were not to be expected, but we had an excellent site at Holywood (VC72), where I recorded 114 species, 38 of them microlepidoptera. Yet from trap and fieldwork, in the whole week from all three counties, I encountered only 84 microlepidoptera, fewer than I recorded with the help of Dr Langmaid in my garden at Saffron Walden on the night of 3rd August 1990. These few species produced no fewer than 48 new county records. When *Pandemis heparana* ([Denis & Schiffermüller]) is new from two counties and *Cnephasia incertana* (Treitschke) from one, it is obvious that microlepidopterists have either avoided the region or failed to publish their records. The only "good" records I made were *Stigmella spinossisimae* (Waters) and *Apotomis semifasciana* (Haworth), both from VC 74. If the list that follows shames microlepidopterists who have operated in this part of Scotland to disgorge their records, a useful purpose will have been served.

The authenticity of my new records up to the end of of the Tortricidae should be 100%, since they have been checked against a draft species/vice-county table for Scotland prepared last winter by Dr K.P. Bland and others. The Pyralidae and Pterophoridae are not yet covered and I have relied on my maps for those families.

I am giving the list of microlepidoptera in full since coverage of the region is so poor. I also recorded 83 species of macrolepidoptera, but now that the recording scheme operated by the Biological Records Centre has been discontinued, I do not know where to send them. The list may be had on application.

There follows a list of the localities from which I recorded. Since I was working from a 1/4 inch map, I give only four-figure map references. They are arranged in chronological order.

13.vii. VC73. Twynholm (3 miles west of village), NX6354. Trap (16 species, including 3 microlepidoptera).

14.vii. VC73. Threave Gardens, NX7660, and footpath to Threave Castle, NX7562 (11 species, including 9 microlepidoptera).

14.vii. VC73. Roadside between Parton and Drumrush, NX6870. A potentially good area but rain intervened (11 microlepidoptera).

14.vii. VC73. Lay-by 1 mile west of New Galloway, NX6277. More rain (1 microlepidopteron).

- 15.vii. VC74. Monreith (2 miles east of village), NX3741. Trap for two nights (50 species, including 15 microlepidoptera).
- 16.vii. VC74. Unnamed tarn north of Mochrum Loch, NX3055. (7 species, including 6 microlepidoptera).
- 16.vii. VC74. Kirkcowan area, NX3360. (3 microlepidoptera).
- 17.vii. VC74. Glenwhan Gardens, Dunragit, NX1757. (7 microlepidoptera).
- 17.vii. VC74. Castle Kennedy Gardens, NX1260. (10 microlepidoptera).
- 18.vii. VC74. Car park adjoining beach, 1 mile south of Ardwell, NX1045 (1 microlepidopteron).
- 18.vii. VC74. Logan Botanic Gardens, NX0843. (1 microlepidopteron).
- 18.vii. VC74. Wood north of Aird, NX0961. (2 microlepidoptera).
- 18.vii. VC74. Rough ground by sea, 2 miles north of Innermessan, NX0866. (2 microlepidoptera).
- 18.vii. VC73. Loch Trool, NX4079. (11 species, including 10 microlepidoptera).
- 18.vii. VC74. Bargrennan, NX3576, on the county boundary, but our hostess assured us her cottage was in Wigtownshire. Trap (30 species, including 6 microlepidoptera).
- 19.vii. VC73. Clatteringshaws Loch, NX5474. (8 species, including 7 microlepidoptera).
- 19.vii. VC72. Maxwellton House Gardens, NX8389. (9 microlepidoptera).
- 19.vii. VC72. Holywood, NX9480. (114 species, including 38 microlepidoptera).
- 20.vii. VC72. Lockerbie, NY1482. (1 microlepidopteron).

Systematic list

An * asterisk indicates a new county record.

ERIOCRANIIDAE

Eriocrania subpurpurella (Haworth) – Vacated mines locally common on *Quercus*. VC72, Maxwellton House. VC73, Threave; Parton; Loch Trool. *VC74, Dunragit.

NEPTICULIDAE

Stigmella sorbi (Stainton) – Vacated mines on *Sorbus aucuparia*. VC72, Maxwellton House. VC73, Loch Trool. VC74, Dunragit.

S. tityrella (Stainton) – Tenanted and vacated mines fairly common on *Fagus*. VC73, Threave. VC74, Castle Kennedy.

S. hemargyrella (Kollar) – Tenanted and vacated mines on *Fagus*. VC73, Threave. VC74, Castle Kennedy.

S. ruficapitella (Haworth) – One vacated mine on *Quercus*. *VC73, Parton.

S. spinosissimae (Waters) – Vacated mines and cocoons on *Rosa pimpinellifolia*. *VC74, Ardwell, the third record from Scotland, the others being from VCs 82 and 104. The Wigtownshire locality is in sight of the Isle of Man, 30 miles across the sea, where there is a strong colony at the Point of Ayr, its most northern extremity.

S. nylandriella (Tengström) – Tenanted and vacated mines on *Sorbus aucuparia*. VC72, Maxwelton House. VC73, Loch Trool. VC74, Dunragit.

S. magdalenae (Klimesch) – A vacated mine on *Sorbus aucuparia*. *VC73, Loch Trool.

S. lapponica (Wocke) – A few vacated mines on *Betula*. VC72, Maxwelton House.

OPOSTEGIDAE

Opostega salaciella (Treitschke) – At m.v. light. VC72, Holywood.

LYONETIIDAE

Leucoptera spartifoliella (Hübner) – Flying round *Cytisus*. VC73, Parton.

Lyonetia clerkella (Linnaeus) – VC73, Twynholm, at m.v. light. VC74, Castle Kennedy, tenanted and vacated mines common on *Malus*.

GRACILLARIIDAE

Caloptilia rufipennella (Hübner) – M.J. Sterling has recorded it from VC73. Although I searched assiduously for it in VC74, where sycamore is abundant, I did not observe it. VC72, Maxwelton House; Lockerbie, larval feeding abundant on *Acer pseudoplatanus*.

C. stigmatella (Fabricius) – A single larval cone on *Salix*. VC72 Maxwelton House.

C. syringella (Fabricius) – Mines on *Fraxinus*: the commonest leaf-miner. VC73, Threave. VC74, Dunragit.

Callisto denticulella (Thunberg) – Mines on *Malus*. *VC74, Castle Kennedy.

Phyllonorycter messaniella (Zeller) – Mines abundant on *Quercus ilex*. *VC74, Castle Kennedy.

P. sorbi (Frey) – Mines on *Sorbus aucuparia*. VC72, Maxwelton House, Holywood, at m.v. light. VC73, Loch Trool. *VC74, Dunragit.

P. corylifoliella (Hübner) – A single mine on *Malus*. *VC73, Footpath to Threave Castle.

P. salicicolella (Sircom) – A single mine on *Salix cinerea*; adult reared. *VC73, New Galloway.

P. maestingella (Müller) – Mines scarce on *Fagus*. VC73, Threave.

P. rajella (Linnaeus) – Mines scarce on *Alnus*. VC73, Parton. *VC74, Kirkcowan; Castle Kennedy.

P. ulmifoliella (Hübner) – Mines scarce on *Betula*. *VC73, Parton; Loch Trool.

P. geniculella (Ragonot) – Mines local on *Acer pseudoplatanus*. VC74, Dunragit.

CHOREUTIDAE

Anthophila fabriciana (Linnaeus) – Adults. VC73, Parton.

YPONOMEUTIDAE

Argyresthia pygmaeella ([Denis & Schiffermüller]) – One adult. VC74, Kirkcowan.

A. conjugella Zeller – Adults. *VC72, at m.v. light. VC73, at rest on *Sorbus aucuparia*.

Paraswammerdamia lutarea (Haworth) – At m.v. light. *VC72, Holywood, *VC74 Bargrennan.

Plutella xylostella (Linnaeus) – At m.v. light. VC72, Holywood.

EPERMENIIDAE

Epermenia chaerophyllella (Goeze) – Larvae on *Heracleum*. *VC73, Threave, *VC74 Dunragit.

COLEOPHORIDAE

Coleophora serratella (Linnaeus) – Larval feeding on *Betula*. VC73, Parton.

C. laricella (Hübner) – Larval feeding on *Larix*. *VC73, Loch Trool; Clatteringshaw Loch.

C. peribenanderi (Toll) – At m.v. light. *VC72, Holywood.

ELACHISTIDAE

Elachista albifrontella (Hübner) – Swept from mixed grasses. VC72, Maxwellton House.

E. humilis Zeller – Swept commonly from *Deschampsia cespitosa*. *VC74, Aird.

Biselachista eleochariella (Stainton) – Swept from damp heathland. *VC74, Tarn north of Mochrum Loch.

OECOPHORIDAE

Borkhausenia fuscescens (Haworth) – At m.v. light. VC72, Holywood.

Hofmannophila pseudospretella (Stainton) – At m.v. light. VC72, Holywood.

Depressaria daucella ([Denis & Schiffermüller]) – Larvae on *Oenanthe*. VC74, Kirkcowan; Castle Kennedy.

D. pastinacella (Duponchel) – Larvae on *Heracleum*. VC74, Dunragit.

Agonopterix alstromeriana (Clerck) – Adults reared from larvae on *Conium*. *VC73, Parton.

A. assimilella (Treitschke) – At m.v. light. VC72, Holywood. *VC74, Bargrennan.

GELECHIIDAE

Scrobipalpa clintoni Povolný – Larvae in stems of *Rumex crispus* growing on shingle. VC74, Innermessan.

MOMPHIDAE

Mompha raschkiella (Zeller) – Larval mines on *Epilobium angustifolium*. VC73, Clatteringshaws Loch, VC74, Innermessan.

M. conturbatella (Hübner) – Adult amongst *Epilobium angustifolium*. *VC73, Parton.

COSMOPTERIGIDAE

Blastodacna hellerella (Duponchel) – At m.v. light. *VC72, Holywood.

TORTRICIDAE

Agapeta hamana (Linnaeus) – At m.v. light. VC74, Monreith.

Pandemis heparana ([Denis & Schiffermüller]) – At m.v. light. *VC72, Holywood. *VC74, Monreith; Bargrennan.

Aphelia paleana (Hübner) – Adult. VC73, Clatteringshaws Loch.

Lozotaenia forsterana (Fabricius) – At m.v. light. *VC72, Holywood. *VC74, Monreith.

Pseudargyrotoza conwagana (Fabricius) – Adult. VC74, Logan Botanic Gardens.

Cnephasia stephensiana f. *octomaculana* Curtis – At m.v. light. *VC72, Holywood.

C. asseclana ([Denis & Schiffermüller]) – At m.v. light. VC72, Holywood.

C. incertana (Treitschke) – At m.v. light. *VC72, Holywood.

Acleris bergmanniana (Linnaeus) – At m.v. light. *VC72, Holywood.

Olethreutes lacunana ([Denis & Schiffermüller]) – At m.v. light. VC72, Holywood. VC73, Parton, adult beaten from herbage.

Hedya pruniana (Hübner) – At m.v. light. VC72, Holywood. VC74, Monreith.

H. dimidioalba (Retzius) – At m.v. light. *VC72, Holywood. VC74, Monreith.

H. atropunctana (Zetterstedt) – Adult. VC73, Clatteringshaw Loch.

Apotomis semifasciana (Haworth) – At m.v. light. The second record from Scotland, the first from VC101. *VC74, Monreith.

Bactra lancealana (Hübner) – At m.v. light. VC73, Twynholm. VC74, Tarn north of Mochrum Loch, adults common.

Zeiraphera ratzeburgiana (Ratzeburg) – Old larval feeding. *VC73, Threave, on an unidentified alien *Picea* species; Loch Trool, on *Picea abies*.

Epiblema uddmanniana (Linnaeus) – At m.v. light. VC72, Holywood.

E. trimaculana (Haworth) – At m.v. light. *VC72, Holywood, VC74, Monreith.

Eucosma hohenwartiana ([Denis & Schiffermüller]) – At m.v. light. VC72, Holywood. VC74, Monreith; Castle Kennedy, adult.

E. cana (Haworth) – At m.v. light. VC72, Holywood. *VC73, Twynholm, VC74, Monreith.

Cydia succedana ([Denis & Schiffermüller]) – At m.v. light. *VC74, Monreith.

PYRALIDAE

- Chrysoteuchia culmella* (Linnaeus) – At m.v. light. VC74, Monreith.
Crambus pascuella (Linnaeus) – At m.v. light. VC72, Holywood. VC74, Monreith; Castle Kennedy, adult.
C. perlella (Scopoli) – At m.v. light. *VC72, Holywood. *VC74, Monreith.
Agriphila straminella ([Denis & Schiffermüller]) – Abundant in grassland. VC72, Maxwellton House; Holywood, at mv. light. VC73, Parton; Loch Trool. VC74, Tarn north of Mochrum Loch; Castle Kennedy.
A. tristella ([Denis & Schiffermüller]) – VC72, Holywood, at mv. light. *VC74, Tarn north of Mochrum Loch, adults.
Catoptria falsella ([Denis & Schiffermüller]) – At m.v. light. *VC72, Holywood.
Scoparia ambigualis (Treitschke) – At m.v. light. VC72, Holywood. VC74, Monreith.
Dipleurina lacustrata (Panzer) – At m.v. light. VC72, Holywood.
Eudonia delunella (Stainton) – At m.v. light. VC72, Holywood.
E. mercurella (Linnaeus) – At m.v. light. *VC72, Holywood. *VC74, Monreith.
Elophila nymphaeata (Linnaeus) – At m.v. light. VC72, Holywood. VC74, Monreith.
Nymphula stagnata (Donovan) – At m.v. light. *VC72, Holywood.
Evergestis pallidata (Hufnagel) – At m.v. light. VC72, Holywood.
Udea lutealis (Hübner) – At m.v. light. VC72, Holywood.
U. prunalis ([Denis & Schiffermüller]) – At m.v. light. *VC72, Holywood.
Pleuroptya ruralis (Scopoli) – At m.v. light. VC72, Holywood.

PTEROPHORIDAE

- Platyptilia pallidactyla* (Haworth) – *VC72, Holywood, at m.v. light. *VC73, Clatteringshaws Loch, adults common round *Achillea*. VC74, Monreith, at m.v. light.

***Synanthedon formicaeformis* (Esp.), Red-tipped Clearwing (Lep.: Sesiidae), further evidence of a two year life-cycle**

Most of the current literature concerning the life-cycle of *Synanthedon formicaeformis* (Esp.) the Red-tipped Clearwing indicates that the species has a one year life-cycle. An observation by Dr Barry Henwood of a larva producing frass from June (when the gall was collected) until August and then overwintering to a prepupal larva in June of the following year suggests that this may not be the case. Fibiger and Kristensen discuss the species and refer to “presumably a single hibernation”. The life-cycle charts in MBGBI volume 7 part 2 describe a one year life-cycle and the description in volume 2 includes the comment “life-cycle said to be one year”.